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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/746,294	12/21/2000	Kristin Robert Stroda	638-29-9-1	1862

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EXAMINER

LIEU, JULIE BICHNGOC

ART UNIT

PAPER NUMBER

2632

DATE MAILED: 01/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/746,294

Applicant(s)

STRODA ET AL.

Examiner

Julie Lieu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

2. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Boon (US Patent No. 5,796,059).

Claim 1:

Boon discloses a method of monitoring a patient, comprising the steps of:

- a. placing a pressure pad that is encased in a cover 52 on a resting place, a bed or a chair, for the patient;
- b. energizing the pressure pad, whereby a signal is provided responsive to pressure placed on the pressure pad by the patient;
- c. arming the pressure pad when a predetermined weight (a minimum weight that causes the detection) the detection is on the pressure pad whereby the pressure pad serves as a sensor;

- d. activating an alarm when the predetermined weight is removed from the armed pressure pad
- e. disposing of the pressure pad when the patient no longer has use of the pressure pad.

Claim 3:

Though not clearly stated, it would be inherent that an alarm is provided to a caretaker.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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4. Claims 6, 11-12, and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boon (US Patent No. 5,796,059) (cited by the applicant).

Claim 6:

The cover of the pressure pad in Boon is plastic, however, it is not disposable.

Nonetheless, the concept making a cover of something disposable in order to achieve clinical sanitary and safe to prevent spread of disease is conventional in the art. For example, disposable bedspread, pillow case, etc... Therefore, it would have been obvious to one of ordinary skill in the art to make the cover in Boon to be disposable as desired so that the device can be place directly beneath the patient.

Claim 11:

Boon discloses a system for monitoring a patient, comprising:

- a. a pressure pad for providing a signal indicating a pressure condition;
- b. a control connected to the pressure pad and responsive to the signal; and
- c. a casing at least partly encasing the pressure pad.

There is no clear indication of the housing for the control and whether encloses the control housing. Nevertheless, one of ordinary skill in the art would have readily recognized that a housing for the control is inherent because any electronic IC should be housed within a housing so that it can protect the control circuit from external environment. It would also have been obvious to one skilled in the art to encase the control circuit within the pressure pad casing because it is convenient to have the control within the pressure pad housing as one signal device.

Claim 12:

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The pressure pad in Boon is activated by removal of pressure and inactivated by application of pressure.

Claim 14:

In Boon, the pressure pad responds to pressure by reducing electrical resistance between a first point and a second point. The apparatus including a switch armed upon the reduction of electrical resistance and an alarm for providing the alarm when the switch has been armed and the electrical resistance is under a predetermined resistance threshold, wherein a movement of the patient from the pressure pad triggers the alarm. Col. 3, third paragraph to col. 4, first paragraph.

A time delay, such as 1 second, is not disclosed in Boon, but the concept of using time delay to avoid false alarm is conventional in the art. Therefore, it would have been obvious to one skilled in the art to use a time delay in the Boon system to prevent false alarm caused by inadvertent movement of the patient.

Claim 15:

The alarm in Boon provides the alarm when the switch has been armed and electrical resistance is under the predetermined resistance threshold. Regarding the time delay between 2 seconds and 3 seconds in duration, it is not disclosed in Boon, but the concept of using time delay to avoid false alarm is conventional in the art. Therefore, it would have been obvious to one skilled in the art to use a time delay in the Boon system to prevent false alarm caused by inadvertent movement of the patient.

Claim 16:

Boon discloses:

- a. a cushion;
- b. an alarm system having a pressure switch and an alarm;
- c. the pressure switch being in communication with the cushion, whereby pressure on the cushion results in pressure on the pressure switch;
- d. the alarm being connected to the pressure switch to be controlled thereby; and
- e. the alarm system being activated by pressure on the pressure switch.

The cushion in Boon is not of a gel type. However, it would have been obvious to one skilled in the art to use a gel cushion in Boon as well as any other type of cushion as desired with a modification within the knowledge of a skilled artisan because they are functionally equivalent.

Claim 17:

In Boon, alarm system is armed upon pressure being placed on the pressure pad and activated upon a release of the pressure if said pressure is removed. Regarding the claimed a predetermined time after the alarm is activated, the concept of using time delay to avoid false alarm is conventional in the art. Therefore, it would have been obvious to one skilled in the art to use a time delay in the Boon system to prevent false alarm caused by inadvertent movement of the patient.

Claims 18 and 19:

Different forms of alarm indication such as visible or audible would not constitute an inventive step but a choice in design because they are functionally equivalent in providing an alert signal to a user.

Claim 20:

In Boon, the pressure switch includes two conductors spaced by a flexible material that permits contact between the conductors under a predetermined amount of pressure.

5. Claims 2, 4-5, 7-10, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boon (US Patent No. 5,796,059) in view of Cross (US Patent No. 5,494,046) (both cited by the applicant).

Claim 2:

Boon fails to disclose a second sensor placed in juxtaposition with the patient. However, Cross teaches the use of a sensor placed in juxtaposition with the patient so that when the patient assumes a dangerous position as indicated by the sensor so that when the patient assumes a dangerous position as indicated by the second sensor, an alarm signal is given and a monitoring station is activated when the alarm signal is provided, and a voice message is announced near the patient. Front figure. In light of this teaching, it would have been obvious to one skilled in the art to combine the features taught in Cross in the system of Boon because it would further provide information to the care taker remote from the patient's location of the patient's dangerous position. Further, the second sensor would provide redundant information as well as more information as to how far away from the bed a chair the patient is after leaving the support structure. The monitoring personnel can further determine the possible undesirable situation based on the combination of the information provided by both sensors.

Claims 4 and 5:

It is not clear in Boon where exactly the alarm is located. However, it would have been obvious to one skilled in the art to recognize positioning the alarm at locations convenient for monitoring staff to be alerted of the situations as taught in Cross (col. 3, lines 32-39).

Claim 7:

Boon discloses a method of monitoring a patient, comprising the steps of placing a pressure pad under the patient that activates a first switch when energized and providing an alarm signal when the pressure pad is activated by removal of pressure and reset by application of pressure.

Boon fails to disclose attaching a fastener to the patient. However, the concept of attaching a fastener to a patient wherein if the patient moves beyond a predetermined distance the switch moves between one of an open state or a closed state to the other of the open or closed state and providing an alarm signal when the second switch is activated is conventional in the art as taught in Cross. In light of this teaching, it would have been obvious to one skilled in the art to combine the features taught in Cross in the system of Boon because it would further provide information to the care taker remote from the patient's location of the patient's dangerous position. Further, the second sensor would provide redundant information as well as more information as to how far away from the bed a chair the patient is after leaving the support structure. The monitoring personnel can further determine the possible undesirable situation based on the combination of the information provided by both sensors.

Claim 8:

Cross shows that the fastener is attached to clothing of the patient.

Claim 9:

It is not clear whether the alarm in Boon is a verbal message to the patient or not. However, Cross teaches using verbal message at either or both the patient and nurse's stations.

One skilled in the art would have readily recognized applying the same concept in the combined system for the same purpose as Cross's.

Claim 10:

Cross teaches transmitting a signal to a remote station and providing an alarm to a caretaker at the remote station.

Claim 13:

It is not clear whether the alarm in Boon is a verbal message to the patient or not. However, Cross teaches using verbal message at either or both the patient and nurse's stations. One skilled in the art would have readily recognized applying the same concept in the combined system for the same purpose as Cross's. The recorded voice message in Cross sound is within hearing distance of the patient.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 703-308-6738. The examiner can normally be reached on Mon-Thursday, 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on 703-305-4717. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

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A handwritten signature in black ink, appearing to read "Julie Lieu", with a long horizontal flourish extending to the right.

Julie Lieu
Primary Examiner
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jl
January 26, 2002